

## **REMARKS**

This Amendment is submitted in response to the Decision on Appeal dated October 28, 2010, and in conjunction with a Request for Continued Examination.

### **I. Rejection under 35 U.S.C. § 103**

Claims 1, 4-7, 10-15, 18-19 and 21-23 stand rejected under 35 U.S.C. § 103 as unpatentable over U.S. Patent No. 6,876,668 to *Chawla et al. (Chawla)* in view of U.S. Patent No. 6,292,834 to *Ravi et al. (Ravi)*. That rejection is respectfully traversed as it might be applied to the claims as amended herein.

#### **A. Combination of *Chawla* and *Ravi* does not disclose “performing an initial link layer negotiation” as recited in exemplary Claim 1**

Applicant respectfully submits that the combination of *Chawla* and *Ravi* does not render exemplary Claim 1 unpatentable under 35 U.S.C. § 103 because that combination of references does not disclose or render obvious performing an initial link layer negotiation recited in exemplary Claim 1 as follows:

performing an initial link layer negotiation between a server and a switch to which the server is connected, wherein the initial negotiation establishes an initial operating frequency of a network link between the server and the switch.

With reference to the foregoing step of exemplary Claim 1, page 3 of the previous Office Action dated June 15, 2006 cites col. 12, line 61 through col. 13, line 4 of *Chawla*, which discloses:

Continuing with the example, the bandwidth reservation processor **500** in each device **201-B** through **201-E** receives the RSVP path and bandwidth reservation request messages. If the bandwidth reservation processor **500** determines that a requesting application or host (e.g., receiving hosts **210-A2** or **210-A3**) has permission or privileges to reserve the requested bandwidth (e.g., RSVP policy control) and also determines that the requested resource (e.g., the 100 Kbps bandwidth) is available in the device **201**, the bandwidth reservation processor **500** in each data communications device **201-B** through **201-E** grants the request and establishes the 100 Kbps bandwidth reservation for the "A" data stream **203** along the path from sending host **210-A1** to receiving hosts **210-A2** and **210-A3**.

Thus, *Chawla* as combined with *Ravi* discloses use of the conventional Resource Reservation Protocol (RSVP) at the transport layer to reserve bandwidth for the data stream of an application or host based on availability in advance of use of the bandwidth in an active communication session.

The combination of *Chawla* and *Ravi* does not render exemplary Claim 1 unpatentable under 35 U.S.C. § 103 because that combination does not disclose or render obvious “performing an initial link layer negotiation between a server and a switch ... [that] establishes an initial operating frequency of a network link.” Instead, the combination of *Chawla* and *Ravi* discloses reservation of a portion of the bandwidth of a network for a session of an application or host utilizing a conventional transport layer protocol (i.e., RSVP). Because the combination of *Chawla* and *Ravi* does not disclose or render obvious each feature of exemplary Claim 1 as amended, Applicant respectfully submits that the rejection of exemplary Claim 1, similar Claims 7 and 21, and their respective dependent claims under 35 U.S.C. § 103 is overcome.

**B. Combination of *Chawla* and *Ravi* does not disclose “measuring an effective data rate” as recited in exemplary Claim 1**

Applicant respectfully submits that the combination of *Chawla* and *Ravi* does not render exemplary Claim 1 unpatentable under 35 U.S.C. § 103 because that combination of references does not disclose or render obvious the determination of an effective data rate as recited in exemplary Claim 1 as follows:

following the initial network layer negotiation, measuring an effective data rate of the server based on network traffic communicated between the server and the switch over the network link.

With reference to the foregoing step of exemplary Claim 1, the Examiner’s Answer and page 3 of the previous Office Action dated June 15, 2006 again cite col. 12, line 61 through col. 13, line 4 of *Chawla*, reproduced *supra*. As noted above, the cited passage of *Chawla* as combined with *Ravi* discloses use of the conventional Resource Reservation Protocol (RSVP) at

the transport layer to reserve bandwidth for the data stream of an application or host based on availability in advance of use of the bandwidth in an active communication session.

As an initial matter, Applicant respectfully submits that the cited passage of *Chawla* as combined with *Ravi* cannot render obvious the step of exemplary Claim 1 for which it is cited because the “measuring” step recited in amended Claim 1 is performed “following the initial link layer negotiation,” whereas the reservation of bandwidth disclosed by *Chawla* and *Ravi* (e.g., at . 12, line 61 through col. 13, line 4 of *Chawla*) is the initial negotiation according to the Examiner. Further, the cited teaching of *Chawla* and *Ravi* does not disclose “measuring an effective data rate of the server based on network traffic communicated between the server and the switch over the link,” as claimed. *Chawla* and *Ravi*, in contrast, discloses reservation of bandwidth by an application or host in advance of use of the bandwidth in a communication session. Because *Chawla/Ravi* grants or denies the reservation in advance of use of the bandwidth in a communication session, the determination of whether or not a bandwidth reservation request is granted is not a measurement of an effective data rate based on network traffic communicated between the server and the switch over the link, as claimed. Consequently, Applicant respectfully submits that the rejection of exemplary Claim 1, similar Claims 7 and 21, and their respective dependent claims under 35 U.S.C. § 103 is overcome.

**C. Combination of *Chawla* and *Ravi* does not disclose “performing a subsequent link layer negotiation to establish a modified operating frequency” as claimed**

Applicant respectfully submits that the combination of *Chawla* and *Ravi* also does not render exemplary Claim 1 unpatentable under 35 U.S.C. § 103 because that combination of references does not disclose or render obvious performing a subsequent negotiation to establish a modified operating frequency as recited in exemplary Claim 1 as follows:

responsive to determining by the measuring that the effective data rate is materially less than a current bandwidth of the network link, performing a subsequent link layer negotiation to establish a modified operating frequency of the link, wherein the modified operating frequency is closer to the measured effective data rate than the initial operating frequency.

With reference to the foregoing step of exemplary Claim 1, the previous Office Action and the Examiner Answer cite col. 13, lines 20–24 of *Chawla* as disclosing performing a subsequent bandwidth adjustment. The cited text states:

If a video client application (not shown) executing on recipient host **210-A3** senses that more network bandwidth is required (such as **120 Kbps**) to effectively receive the "A" video data stream **203**, the host **210-A3** can use RSVP to make a bandwidth reservation request (not shown) containing bandwidth allocation adjustment information to each network device **201-E**, **201-D**, **201C** and **201-B**.

In recognition that the cited passage of *Chawla* discloses reserving an increased bandwidth allocation rather than establishing a decreased bandwidth closer to a measured effective data rate, col. 7, lines 16-25 of *Ravi* is additionally cited as disclosing decreasing the transmission rate (or bandwidth) of a data stream.

Thus, the combination of *Chawla* and *Ravi* discloses use of the conventional Resource Reservation Protocol (RSVP) at the transport layer to decrease the bandwidth reservation of a data stream. Thus, the combination of *Chawla* and *Ravi* does not disclose or render obvious a “link layer negotiation to establish a modified operating frequency of the link” as claimed. Because the combination of *Chawla* and *Ravi* does not disclose or render obvious each feature of exemplary Claim 1 as amended, Applicant respectfully submits that the rejection of exemplary Claim 1, similar Claims 7 and 21, and their respective dependent claims under 35 U.S.C. § 103 is overcome.

## **II. Conclusion**

The foregoing remarks demonstrate that the presently pending claims are not rendered unpatentable by the combination of *Chawla* and *Ravi* under 35 U.S.C. § 103. Applicant accordingly respectfully submits that all claims now pending are in condition for allowance and respectfully requests such allowance.

Applicant has submitted the fees for a Request for Continued Examination and three additional dependent claims in excess of 20. No additional fee is believed to be required. However, should any fees be required, please charge such fees to **IBM Deposit Account No. 09-0447**.

Respectfully submitted,

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